

**Drum Mine Reclamation Plan**  
**Joint Agency Meeting Memo**  
**M/027/007**

On August 19, 1999, a meeting was held in the Division offices between DWQ, BLM and DOGM personnel to discuss the latest amended Settlement Agreement and Reclamation Plan for the Drum Mine. The following individuals attended: Tom Mitchell, Mary Ann Wright, Wayne Hedberg, Tom Munson and Doug Jensen (DOGM), Terry Snyder, Rex Rowley and Sheri Wysong (BLM), and Dennis Frederick and Mark Novak (DWQ). The meeting began with Tom Mitchell reading through some of the proposed (amended) changes to the present "approved" Settlement Agreement between DOGM, BLM, DWQ & Western States Minerals Corporation (WSMC). Tom explained that most of the proposed changes were minor language changes and not significant modifications to the main core of the original agreement. Exceptions include: 1) WSMC will now assume full reclamation responsibility for the Drum Mine site, and 2) the BLM, DOGM and DWQ will assume full post-reclamation monitoring and maintenance responsibility. DOGM and BLM legal counsels have identified the following language changes in the amended Settlement Agreement that will cause problems if implemented as proposed:

- A requirement that *all* reclamation bonds held by DOGM will be released when WSMC completes the Drum Mine reclamation (coal reclamation bonds will be processed as a separate issue).
- The time frames stated for DOGM's payment of Jumbo Mining Company's (JMC) forfeited reclamation surety after WSMC completes the reclamation are too short. Revised time frames will be proposed for the appropriate sections of the revised agreement by DOGM & BLM counsel.
- BLM would also contribute supplemental monies to offset reclamation costs incurred by Western States for completing reclamation of the entire Drum mine site (no funds are available).

DWQ was asked directly if there were any remaining water related issues associated with the Drum closure. DWQ indicated that water issues associated with the localized "perched aquifer" were no longer considered a significant reclamation concern. The perched aquifer was a result of active heap leaching operations. Active leaching has not occurred on the site for at least 8 years.

The BLM expressed a concern that the anticipated time for project completion would miss the best seeding window (fall/99). We discussed the possibility of retaining some of the reclamation monies for a fall/2000 planting, which should provide a better chance for revegetation success.

Some question of the reclaimed slope angles was also an issue. The latest plan does not stipulate a 3H:1V reclaimed slope angle as discussed in earlier meetings. Instead the slopes are described as 2-3H:1V raising a question as to whether this leaves the overall slope at 2 or 3:1 as a discretionary call by WSMC. It was agreed that 2H:1V was too steep; however, there are areas at the site where this may be the best slope angle that can be achieved. We will request that WSMC amend the reclamation plan to state that reclaimed slope angles of 2.5-3H:1V be strived for. If onsite conditions dictate that a steeper slope angle is necessary, then a variance will be sought from the designated onsite BLM/DOGM representative.

Reclamation of the Alto Pit was brought up during the meeting. It was decided that this disturbance feature (created by Jumbo Mining Company) could not be incorporated into WSMC's current reclamation plan. The original signed Settlement Agreement did not identify or contemplate reclamation of this disturbance.

BLM raised the question of backfilling the two pits with the adjacent waste dumps instead of just recontouring and revegetating the dumps. It was discussed and determined that this would be cost prohibitive and an unreasonable additional reclamation expense to impose upon WSMC as part of this settlement agreement. It is also unlikely that DWQ would not allow HG#7 heap material (built on top of waste dump #7) to be pushed off the liner into the pit.

During a recent (8/18/99) DOGM site visit, 6 or 7 open portals were noted in the bottom of the North Pit. Traffic patterns in the area showed that there has been recent public activity in and around these open features. These mine openings are extremely dangerous because of unstable roof and pit high wall conditions. Several suggestions for closing them were discussed, but an overall decision was not made. All agencies agreed that this is technical and public safety concern that should be discussed with WSMC during the August 24<sup>th</sup> meeting.

Supervision of the reclamation activities was discussed and BLM stated that they would not have a problem with DOGM assuming this lead responsibility. As presently drafted in the amended Settlement Agreement, BLM would act as the lead agency in determining the adequacy of WSMC's reclamation efforts. DOGM management will make a decision as to the level of participation we can afford to contribute.

Development of a reclamation bench-mark schedule was also discussed. This would entail placing check marks in the earthmoving process requiring agency sign-off as critical stages/steps of reclamation work are completed by WSMC. The critical stages will need to be jointly outlined and agreed to by the agencies and WSMC before reclamation work begins.

Five suggested check points might be:

- when the pond liners were collapsed over the pond residue
- when re-contouring of a specific unit is complete (before application of growth medium)
- when growth medium is pre-stripped from designated borrow areas
- after the growth medium is applied, and
- during and following the mulching and seeding stage(s).

It was also agreed that a process to quickly modify the reclamation plan to accommodate unusual and/or unforeseen field conditions also needs to be determined.